

AMENDMENT TO THE CLAIMS

Claim 1 is amended as presented below. A detailed listing of the status of all claims that have been in the application is also hereafter provided.

1. (Currently Amended) A cross-linkable or cross-linked rubber composition usable for constituting a tire tread, said composition being based on one or more diene elastomers and a plasticizer, wherein said plasticizer comprises:

one or more synthetic and/or natural compounds not extracted from petroleum present in a mass fraction of from 45% to 100%, wherein at least one of said natural compounds is sunflower oil, said sunflower oil comprising at least one glycerol fatty acid triester, wherein as a whole, the fatty acids in said ~~triester~~ sunflower oil comprise oleic acid in a mass fraction equal to or greater than 70%, wherein the amount of said ~~compounds~~ sunflower oil in the composition is from 10 to 40 phr, and

one or more plasticizing oils extracted from petroleum in a mass fraction of from 0% to 55%, wherein the plasticizing oils are selected from the group consisting of paraffinic, aromatic and naphthenic oils.

2. Cancelled

3. (Previously Presented) The cross-linkable or cross-linked rubber composition according to Claim 1, wherein the fatty acids comprise oleic acid in a mass fraction equal to or greater than 85%.

4. (Original) The cross-linkable or cross-linked rubber composition according to Claim 1, wherein said synthetic compound not extracted from petroleum is glycerol oleic acid triester.

5. Cancelled

6. Cancelled

7. Cancelled

8. Cancelled

9. (Previously Presented) The cross-linkable or cross-linked rubber composition according to Claim 1, wherein said plasticizers comprises one or more synthetic and/or natural compounds not extracted from petroleum in a mass fraction of from 70% to 100%, and said one or more plasticizing oils extracted from petroleum is in a mass fraction of from 0% to 30%.

10. (Original) The cross-linkable or cross-linked rubber composition according to Claim 9, wherein said plasticizer comprises one or more synthetic and/or natural compounds not extracted from petroleum in a mass fraction of from 80% to 100%, and said one or more plasticizing oils extracted from petroleum in a mass fraction from 0% to 20%.

11. (Original) The cross-linkable or cross-linked rubber composition according to Claim 10, wherein said plasticizer comprises one or more synthetic and/or natural compounds not extracted from petroleum in a mass of 100%.

12. (Previously Presented) The cross-linkable or cross-linked rubber composition according to Claim 1, wherein said composition comprises one or more plasticizing oils extracted from petroleum in a quantity of from 0 to 30 phr.

13. (Previously Presented) The cross-linkable or cross-linked rubber composition according to Claim 12, wherein said composition comprises one or more synthetic and/or natural compounds not extracted from petroleum in a quantity of from 20 to 35 phr, and said one or more plasticizing oils extracted from petroleum in a quantity of from 0 to 20 phr.

14. (Original) The cross-linkable or cross-linked rubber composition according to Claim 1, wherein said composition comprises between 50 phr and 100 phr of a majority of diene elastomer having a glass transition temperature of between -65°C and -10°C , and between 0 phr

and 50 phr of a minority diene elastomer having a glass transition temperature of between – 110°C and -80°C.

15. (Previously Presented) The cross-linkable or cross-linked rubber composition according to Claim 14, wherein said majority diene elastomer is selected from the group consisting of solution-prepared styrene-butadiene copolymers, emulsion-prepared styrene-butadiene copolymers, natural polyisoprenes, synthetic polyisoprenes having a cis-1,4 linkage content greater than 95% and mixtures thereof, and said minority diene elastomer is a polybutadiene having a cis-1,4 linkage content greater than 90%.

16. (Original) The cross-linkable or cross-linked rubber composition according to Claim 15, wherein said solution prepared styrene-butadiene copolymer have a glass transition temperature of from -50°C to -15°C and trans-1,4 butadiene linkage content which is greater than 50%.

17. (Original) The cross-linkable or cross-linked rubber composition according to Claim 16, wherein said emulsion-prepared styrene-butadiene copolymers have a glass transition temperature of from -55°C to -30°C.

18. (Original) The cross-linkable or cross-linked rubber composition according to Claim 14, wherein said majority diene elastomer is present an a quantity of 100 phr.

19. (Original) The cross-linkable or cross-linked rubber composition according to Claim 14, wherein said composition comprises a blend of said majority and minority diene elastomers.

20. (Original) The cross-linkable or cross-linked rubber composition according to Claim 19, wherein the blend comprises polybutadienes having a cis-1,4 linkage content greater than 90% and an emulsion-prepared styrene-butadiene copolymer.

21. (Original) The cross-linkable or cross-linked rubber composition according to Claim 1, wherein said reinforcing filler is carbon black in a quantity of from 60 to 200 phr.

22. (Original) The cross-linkable or cross-linked rubber composition according to Claim 1, wherein said reinforcing filler is a reinforcing white filler in a quantity equal to or greater than 70 phr.

23. (Original) The cross-linkable or cross-linked rubber composition according to Claim 1, wherein said reinforcing filler is a blend of carbon black and a reinforcing white filler.

24. (Previously Presented) The cross-linkable or cross-linked rubber composition according to Claim 1, wherein said plasticizer further comprises a hydrocarbon plasticizing resin in a quantity of from 5 to 20 phr, wherein said hydrocarbon plasticizing resin is miscible in said diene elastomer(s), has a glass transition temperature of between 10°C and 150°C and a number-average molecular weight of between 400 g/mol and 2000 g/mol.

25. (Original) The cross-linkable or cross-linked rubber composition according to Claim 24, wherein said plasticizing resin has a glass transition temperature of from 30°C to 100°C, a number-average molecular weight of between 400 and 1000 g/mol, and a polymolecularity index less than 2.

26. (Original) A tread for a tire comprising a rubber composition in accordance with Claim 1.

27. (Original) A tire comprising a tread according to Claim 26.